

1419134

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Device connector rear mounting, PROFINET CAT5 (100 Mbps) CAT5 (100 Mbps), 4-position, PVC halogen-free, green RAL 6018, shielded, Socket, straight, M12-SPEEDCON, coding: D, on free cable end, Rear mounting, M16 x 1.5, Cable connection, cable length: 0.5 m, PROFINET, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239225

Your advantages

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- · Cable designs for all common networks and fieldbuses
- · For high transmission safety: shield connection to the housing with optional EMC nut
- Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1%) available

Commercial data

Item number	1419134
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGI
Catalog page	Page 315 (PC-2011)
GTIN	4046356540599
Weight per piece (including packing)	69 g
Weight per piece (excluding packing)	59 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

General	Contact connection method: Crimp connection
afety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	 WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	The products are suitable for applications in plant, controller, and electrical device engineering.
	When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	 Assembled products may not be manipulated or improperly opened.
	 Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	 When using the product in direct connection with third-party manufacturers, the user is responsible.
	 For operating voltages > 50 V AC, conductive connector housings must be grounded
	 Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	Only use tools recommended by Phoenix Contact
	Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	 Ensure that the protective or functional ground has been properly connected.
	 VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector
	The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to



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Connection technology

	warnings (e.g. DIN EN ISO 13732-1:2008-12).
roduct properties	
Product type	Data cable preassembled
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	D
Thread type	M12
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3
terfaces	
Bus system	PROFINET
Signal type/category	PROFINET CAT5 (IEC 11801:2002), 100 Mbps
ectrical properties	
Rated surge voltage	2.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	250 V
Nominal current I _N	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
echanical properties Mechanical data	
Insertion/withdrawal cycles	≥ 100
aterial specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Brass, nickel-plated
Outer sheath, material	PVC



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Connection method	Cable connection
Conductor connection	
Contact connection type	Socket
Connection method	Cable connection
Tightening torque	2 Nm 3 Nm (Installation-side)

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	D

Connection 2

Head design	free cable end

Cable/line

Cable length	0.5 m
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PROFINET PVC stranded CAT5 [93B]

Dimensional drawing



Cable weight	67 kg/km
UL AWM Style	21694
Number of positions	4
Shielded	yes
Cable type	PROFINET PVC stranded CAT5 [93B]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	green RAL 6018



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Thickness, outer sheath Overall twist Star quad Optical shield covering Insulation resistance ≥ 500 MΩ*km Coupling resistance ≥ 500 MΩ*km Coupling resistance ≥ 120.00 Ω/km Wave impedance Loop resistance ≥ 120.00 Ω/km Wave impedance 100 Ω ± 15 Ω (at 100 MHz) Nominal voltage, cable Test voltage Core/Core 2000 V (50 Hz, 1 min.) Test voltage Core/Shield 2000 0V (50 Hz, 1 min.) Test voltage Core/Shield 2000 0V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 7 x D Smallest bending radius, fixed installation 0 mm Smallest bending radius, movable installation Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 70 dB (at 10 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 65 dB (at 62.5 MHz) 65 dB (at 62.5 MHz) 63 dB (at 100 MHz) 8 dB (at 100 MHz) 11.4 dB (at 31.25 MHz) 12.3 dB (at 10 MHz) 8 dB (at 10 MHz) 13.4 dB (at 4 MHz) 14.4 dB (at 31.25 MHz) 15.5 dB (at 62.5 MHz) 15.5 dB (a	Conductor material	Tin-plated Cu litz wires
Thickness, outer sheath Overall twist Star quad Optical shield covering Insulation resistance ≥ 500 MΩ*km Coupling resistance ≥ 500 MΩ*km Coupling resistance ≥ 120.00 Ω/km Wave impedance Loop resistance ≥ 120.00 Ω/km Wave impedance 100 Ω ± 15 Ω (at 100 MHz) Nominal voltage, cable Test voltage Core/Core 2000 V (50 Hz, 1 min.) Test voltage Core/Shield 2000 0V (50 Hz, 1 min.) Test voltage Core/Shield 2000 0V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 7 x D Smallest bending radius, fixed installation 0 mm Smallest bending radius, movable installation Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 70 dB (at 10 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 65 dB (at 62.5 MHz) 65 dB (at 62.5 MHz) 63 dB (at 100 MHz) 8 dB (at 100 MHz) 11.4 dB (at 31.25 MHz) 12.3 dB (at 10 MHz) 8 dB (at 10 MHz) 13.4 dB (at 4 MHz) 14.4 dB (at 31.25 MHz) 15.5 dB (at 62.5 MHz) 15.5 dB (a	Material wire insulation	PE
Overall twist Star quad Optical shield covering 85 % Insulation resistance ≥ 500 MΩ*km Coupling resistance ≤ 120.00 Ω/km Uson Festistance ≤ 120.00 Ω/km Wave impedance 100 Ω ± 15 Ω (at 100 MHz) Nominal voltage, cable 600 ∨ Test voltage Core/Core 2000 0 ∨ (50 Hz, 1 min.) Test voltage Core/Shield 2000.00 ∨ (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 20 mm Smallest bending radius, fixed installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 65 dB (at 16 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 4 dB (at 6 MHz) 9 dB (at 20 MHz) 4 dB (at 6 LB MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz)	Single wire, color	white, yellow, blue, orange
Optical shield covering 85 % Insulation resistance ≥ 500 MΩ*km Coupling resistance ≤ 20.00 mΩ/m (at 10 MHz) Loop resistance ≤ 120.00 Ω/km Wave impedance 100 Ω ±15 Ω (at 100 MHz) Nominal voltage, cable 600 V Test voltage Core/Core 2000 v (50 Hz, 1 min.) Test voltage Core/Shield 2000 00 V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 7 x D Smallest bending radius, fixed installation 20 mm Smallest bending radius, fixed installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 76 dB (at 10 MHz) 63 dB (at 10 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 63 dB (at 10 MHz) Shield attenuation 21 dB (with 1 MHz) 4 dB (at 4 MHz) 63 dB (at 10 MHz) 16.5 dB (at 62.5 MHz) 9 dB (at 10 MHz) 21 dB (with 1 MHz) 4 dB (at 6 MHz) 9 dB (at 20 MHz) 11 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 12 dB (at 10 MHz	Thickness, outer sheath	approx. 0.90 mm
Soo MΩ*km	Overall twist	Star quad
Coupling resistance ≤ 20.00 mΩ/m (at 10 MHz) Loop resistance ≤ 120.00 Ω/km Wave impedance 100 Ω ±15 Ω (at 100 MHz) Nominal voltage, cable 600 V Test voltage Core/Core 2000 V (50 Hz, 1 min.) Test voltage Core/Shield 2000.00 V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 20 mm Smallest bending radius, movable installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 10 MHz) 65 dB (at 10 MHz) 65 dB (at 10 MHz) 65 dB (at 10 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 56 dB (at 10 MHz) 4 dB (at 4 MHz) 4 dB (at 4 MHz) 4 dB (at 4 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 51 dB (at 100 MHz) 4 dB (at 100 MHz) 51 dB (at 100 MHz) 4 dB (at 4 MHz) 62 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 63 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 64 dB (at 20 MHz) 1	Optical shield covering	85 %
Loop resistance ≤ 120.00 Ω/km Wave impedance 100 Ω ±15 Ω (at 100 MHz) Nominal voltage, cable 600 ∨ Test voltage Core/Core 2000 ∨ (50 Hz, 1 min.) Test voltage Core/Shield 2000.00 ∨ (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 20 mm Smallest bending radius, fixed installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 25 MHz) 15.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200)	Insulation resistance	≥ 500 MΩ*km
Wave impedance 100 Ω ±15 Ω (at 100 MHz) Nominal voltage, cable 600 V Test voltage Core/Core 2000 V (50 Hz, 1 min.) Test voltage Core/Shield 2000.00 V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 7 x D Smallest bending radius, fixed installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 76 dB (at 4 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 10.3 dB (at 10 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 62.5 MHz) 2.1 dB (with 1 MHz) 2.1 dB (with 1 MHz) 8 dB (at 10 MHz) 11.4 dB (at 10 MHz) 11.4 dB (at 10 MHz) 11.4 dB (at 10 MHz) 12.1 dB (at 10 MHz)	Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)
Nominal voltage, cable 600 V Test voltage Core/Core 2000 V (50 Hz, 1 min.) Test voltage Core/Shield 2000.00 V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixexible installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 20 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) 4 dB (at 4 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 100 MHz) Shield attenuation 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 4 dB (at 62.5 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 12.3 dB (at 10 MHz) 11.4 dB (at 31.25 MHz) 13.3 dB (at 100 MHz) 11.4 dB (at 31.25 MHz) 15.5 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 12.3 dB (at 100 MHz) Flame resistance	Loop resistance	≤ 120.00 Ω/km
Test voltage Core/Core 2000 V (50 Hz, 1 min.) Test voltage Core/Shield 2000.00 V (50 Hz, 1 min.) Minimum bending radius, fixed installation 7 x D Smallest bending radius, fixed installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 70 dB (at 10 MHz) 65 dB (at 6 MHz) 63 dB (at 20 MHz) 65 dB (at 10 MHz) 65 dB (at 120 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 4 dB (at 100 MHz) Shield attenuation 4 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 100 MHz) 4 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 3 1.25 MHz) 11.4 dB (at 10 MHz) 2 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistant to oil to a limited extent UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) 40 °C 70 °C	Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Test voltage Core/Shield 2000.00 V (50 Hz, 1 min.) Minimum bending radius, fixed installation 3 x D Minimum bending radius, fixed installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 70 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 60 dB (at 31.25 MHz) 50 dB (at 100 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 10 MHz) 8 dB (at 10 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.3 dB (at 10 MHz) 8 dB (at 10 MHz) 8 dB (at 10 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) 40 °C 70 °C (Cable, fixe	Nominal voltage, cable	600 V
Minimum bending radius, fixed installation 3 x D Smallest bending radius, fixed installation 20 mm Smallest bending radius, fixed installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) 4 dB (at 4 MHz) 4 dB (at 4 MHz) 63 dB (at 10 MHz) 8 dB (at 10 MHz) 4 dB (at 4 MHz) 6 3 dB (at 10 MHz) 8 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) 40 °C 70 °C (cable, fixed installation) 40 °C 70 °C (Cable, fixeible installation)	Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Minimum bending radius, flexible installation 7 x D Smallest bending radius, fixed installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 4 dB (at 4 MHz) 6.3 dB (at 100 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) 40 °C 70 °C (Cable, flexible installation)	Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, flexible installation 7 x D Smallest bending radius, fixed installation 20 mm Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 4 dB (at 4 MHz) 6.3 dB (at 100 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) 40 °C 70 °C (Cable, flexible installation)	Minimum bending radius, fixed installation	
Smallest bending radius, movable installation 46 mm Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 15.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) 40 °C 70 °C (Cable, fixed installation) 40 °C 70 °C (Cable, flexible installation)	Minimum bending radius, flexible installation	7 x D
Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz) 76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 10 MHz) 8 dB (at 10 MHz) 8 dB (at 10 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 12.3 dB (at 100 MHz) 12.3 dB (at 100 MHz) 18.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 18.5 dB (at 62.5 MHz) 19.5 dB (at 62.5 MHz) 10.5 dB (at	Smallest bending radius, fixed installation	20 mm
76 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 8 dB (at 100 MHz) 11.4 dB (at 31.25 MHz) 12.3 dB (at 100 MHz) 8 dB (at 100 MHz) 10.5 dB (at 62.5 MH	Smallest bending radius, movable installation	46 mm
70 dB (at 10 MHz)	Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
65 dB (at 16 MHz)		76 dB (at 4 MHz)
63 dB (at 20 MHz)		70 dB (at 10 MHz)
60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz) Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 18 dB (at 100 MHz) 18 dB (at 30 MHz) 19 dB (at 20 MHz) 10 dB (at 30 MHz) 10 dB (at 30 MHz) 11 dB (at 31.25 MHz) 10 dB (at 30 MHz) 11 dB (at 30 MHz) 11 dB (at 30 MHz) 12 dB (at 30 MHz) 13 dB (at 30 MHz) 14 dB (at 31.25 MHz) 15 dB (at 62.5 MHz) 16 dB (at 30 MHz) 17 dB (at 30 MHz) 18 dB (at 30 MHz) 19 dB (at 30 MHz) 10 dB (at 40 MHz) 10 dB (at 30 MHz) 10 dB (at 4 MHz) 10 dB (at 4 MHz) 10 dB (at 4 MHz) 10 dB (at 10 MH		65 dB (at 16 MHz)
55 dB (at 62.5 MHz)		63 dB (at 20 MHz)
Shield attenuation 2.1 dB (with 1 MHz)		60 dB (at 31.25 MHz)
Shield attenuation 2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		55 dB (at 62.5 MHz)
4 dB (at 4 MHz)		50 dB (at 100 MHz)
6.3 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (Cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)	Shield attenuation	2.1 dB (with 1 MHz)
8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		4 dB (at 4 MHz)
9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		6.3 dB (at 10 MHz)
11.4 dB (at 31.25 MHz) 16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (Cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		8 dB (at 16 MHz)
16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (Cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		9 dB (at 20 MHz)
21.3 dB (at 100 MHz) Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		11.4 dB (at 31.25 MHz)
Flame resistance according to UL 1685 (CSA FT 4) Resistance to oil Resistant to oil to a limited extent Other resistance UV resistant (According to UL 1581, Section 1200) Ambient temperature (operation) -40 °C 70 °C (Cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		16.5 dB (at 62.5 MHz)
Resistance to oil Other resistance UV resistant (According to UL 1581, Section 1200) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		21.3 dB (at 100 MHz)
Resistance to oil Other resistance UV resistant (According to UL 1581, Section 1200) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)	Flame resistance	according to UL 1685 (CSA FT 4)
Ambient temperature (operation) -40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)	Resistance to oil	Resistant to oil to a limited extent
-40 °C 70 °C (Cable, flexible installation)	Other resistance	UV resistant (According to UL 1581, Section 1200)
-40 °C 70 °C (Cable, flexible installation)	Ambient temperature (operation)	-40 °C 70 °C (cable, fixed installation)
Ambient temperature (installation) -20 °C 60 °C		-40 °C 70 °C (Cable, flexible installation)
	Ambient temperature (installation)	-20 °C 60 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65/IP67



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Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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